

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1-36. (canceled)

37. (previously presented) A method for identifying one or more micro-organism and/or micro-organism species, and for measuring the portion of at least one micro-organism and/or micro-organism species from a sample, characterized in that

a) binding to a structure individualizing at least one micro-organism species or group and enabling identification a first fluorescent agent that absorbs light in a first wavelength area,

b) binding to a structure characteristic of all micro organisms a second fluorescent agent that absorbs light in a second wavelength area,

c) subjecting the sample to flow,

d) exciting the aforementioned first fluorescent agent in the aforementioned flow with a monochromatic light disposed in the first wavelength area,

e) exciting the aforementioned second fluorescent agent in the aforementioned flow with a monochromatic light disposed in the second wavelength area,

f) identifying the target micro-oraganism by analyzing the fluorescence of the fluorescent agents bound to the particles of the sample,

and in that the fluorescent agents and the wavelength areas of the monochromatic light are chosen in such a manner that the difference in intensities of the mean fluorescences of the fluorescent agents is at least about double on a logarithmic scale.

38. (previously presented) The method according to claim 37, characterised in that the method further comprises a step at which the portion(s) of the identified target micro-organism(s) is/are calculated from the total amount of sample.

39. (previously presented) The method according to claim 37, characterised in that a measurable difference in intensities between the fluorescences of the fluorescent agents is achieved in the first wavelength area.

40. (previously presented) The method according to of claim 37, characterised in that the sample is introduced into a flow cytometer.

41. (previously presented) The method according to claim 37, characterised in that a first fluorescent agent is attached to the probes that are bound to the structure individualizing at least one micro-organism species or group in the sample and enabling the identification.

42. (previously presented) The method according to claim 37, characterised in that a structure individualizing one micro-organism species or group and enabling the identification is a ribosomal RNA molecule.

43. (previously presented) The method according to claim 37, characterised in that a structure characteristic of all micro-organisms is DNA.

44. (previously presented) The method according to claim 37, characterised in that a threshold value is set for each micro-organism for each parameter specifically, and the micro-organisms are classified based on their threshold values.

45. (previously presented) The method according to claim 37, characterised in that the fluorescent agent is a fluorochrome.

46. (previously presented) The method according to claim 37, characterised in that the micro-organism is a bacterium and/or a bacterial species.

47. (previously presented) The method according to claim 46, characterised in that the aforementioned ribosomal RNA molecules are chosen from a group consisting of 16S ribosomal RNA molecules and 23S ribosomal RNA molecules.

48. (previously presented) The method according to claim 37, characterised in that the light scattering from the particles of the sample is detected.

49. (previously presented) The method according to claim 37, characterised in that micro particles are further separated from the sample based on their scattering and/or fluorescence properties.

50. (previously presented) The method according to claim 37, characterised in that the first wavelength area is 600-650 nm.

51. (previously presented) The method according to claim 37, characterised in that the second wavelength area is 350-600 nm.

52. (previously presented) The method according to claim 37, characterised in that the monochromatic lights disposed in the first and second wavelength area are formed by one light source.

53. (previously presented) The method according to claim 37, characterised in that the monochromatic lights disposed in the aforementioned first and second wavelength area are formed by at least two light sources.

54. (previously presented) The method according to claim 53, characterised in that at least two of the aforementioned at least two light sources are disposed at a distance from each other, and in that in the method, signal delay equipment is used to delay the measuring signals being created by means of the first and optionally the subsequent light sources.

55. (previously presented) The method according to claim 37, characterised in that the sample is a sample from a mammal's organism fluid.

56. (previously presented) The method according to claim 55, characterised in that the sample is a sample originating from a mammal's digestive system.

57. (previously presented) The method according to claim 37, characterised in that the sample is a waste water sample.

58-66. (canceled)

67. (previously presented) The use of a method according to claim 37 for identifying micro-organisms and for measuring their portions.

68. (previously presented) The use according to claim 67, characterised in that the micro-organism is a probiotic bacterial strain.

69-70. (canceled)